

PATENT COOPERATION TREATY

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NOTIFICATION OF ELECTION

(PCT Rule 61.2)

From the INTERNATIONAL BUREAU

To:

Assistant Commissioner for Patents
 United States Patent and Trademark
 Office
 Box PCT
 Washington, D.C.20231
 ETATS-UNIS D'AMERIQUE

in its capacity as elected Office

Date of mailing (day/month/year) 23 May 2000 (23.05.00)	
International application No. PCT/EP99/08480	Applicant's or agent's file reference SCB509PCT
International filing date (day/month/year) 09 November 1999 (09.11.99)	Priority date (day/month/year) 11 November 1998 (11.11.98)
Applicant BARBUCCI, Rolando et al	

1. The designated Office is hereby notified of its election made:

☒ in the demand filed with the International Preliminary Examining Authority on:
 08 May 2000 (08.05.00)

☐ in a notice effecting later election filed with the International Bureau on:

2. The election ☒ was

☐ was not

made before the expiration of 19 months from the priority date or, where Rule 32 applies, within the time limit under Rule 32.2(b).

The International Bureau of WIPO
 34, chemin des Colombettes
 1211 Geneva 20, Switzerland

Facsimile No.: (41-22) 740.14.35

Authorized officer

Pascal Piriou

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PATENT COOPERATION TREATY

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REC'D 07 FEB 2001

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INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference SCB509PCT		FOR FURTHER ACTION See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416)			
International application No. PCT/EP99/08480	International filing date (day/month/year) 09/11/1999	Priority date (day/month/year) 11/11/1998			
International Patent Classification (IPC) or national classification and IPC C08B15/00					
Applicant AQUISITIO S.P.A. et.al.					
<p>1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.</p> <p>2. This REPORT consists of a total of 5 sheets, including this cover sheet.</p> <p><input type="checkbox"/> This report is also accompanied by ANNEXES, i.e. sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).</p> <p>These annexes consist of a total of sheets.</p>					
<p>3. This report contains indications relating to the following items:</p> <ul style="list-style-type: none">I <input checked="" type="checkbox"/> Basis of the reportII <input type="checkbox"/> PriorityIII <input type="checkbox"/> Non-establishment of opinion with regard to novelty, inventive step and industrial applicabilityIV <input type="checkbox"/> Lack of unity of inventionV <input checked="" type="checkbox"/> Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statementVI <input type="checkbox"/> Certain documents citedVII <input type="checkbox"/> Certain defects in the international applicationVIII <input checked="" type="checkbox"/> Certain observations on the international application					
Date of submission of the demand 08/05/2000		Date of completion of this report 07.02.2001			
Name and mailing address of the international preliminary examining authority:  European Patent Office - P.B. 5818 Patentlaan 2 NL-2280 HV Rijswijk - Pays Bas Tel. +31 70 340 - 2040 Tx: 31 651 epo nl Fax: +31 70 340 - 3016		Authorized officer Lensen, H  Telephone No. +31 70 340 2428			

**INTERNATIONAL PRELIMINARY
EXAMINATION REPORT**

International application No. PCT/EP99/08480

I. Basis of the report

1. This report has been drawn on the basis of *(substitute sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to the report since they do not contain amendments (Rules 70.16 and 70.17).):*

Description, pages:

1-20 as originally filed

Claims, No.:

1-11 as originally filed

2. With regard to the **language**, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.

These elements were available or furnished to this Authority in the following language: , which is:

- ☐ the language of a translation furnished for the purposes of the international search (under Rule 23.1(b)).
- ☐ the language of publication of the international application (under Rule 48.3(b)).
- ☐ the language of a translation furnished for the purposes of international preliminary examination (under Rule 55.2 and/or 55.3).

3. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:

- ☐ contained in the international application in written form.
- ☐ filed together with the international application in computer readable form.
- ☐ furnished subsequently to this Authority in written form.
- ☐ furnished subsequently to this Authority in computer readable form.
- ☐ The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.
- ☐ The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

4. The amendments have resulted in the cancellation of:

- ☐ the description, pages:
- ☐ the claims, Nos.:
- ☐ the drawings, sheets:

5. ☐ This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed (Rule 70.2(c)):

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No. PCT/EP99/08480

(Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.)

6. Additional observations, if necessary:

V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Yes:	Claims	1-10
	No:	Claims	11
Inventive step (IS)	Yes:	Claims	1-10
	No:	Claims	11
Industrial applicability (IA)	Yes:	Claims	1-11
	No:	Claims	

2. Citations and explanations see separate sheet

VIII. Certain observations on the international application

The following observations on the clarity of the claims, description, and drawings or on the question whether the claims are fully supported by the description, are made:
see separate sheet

Re Item V

Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1). The document D4 (=EP-A-566118) was cited in the description but not in the international search report.

2). Art. 33 (2) PCT (Novelty) :

D4 discloses a process for the preparation of water-swellaable, water-insoluble modified polysaccharides comprising the steps of forming a mixture of a water-soluble modified polysaccharide, water and a crosslinking agent. The modified polysaccharide is recovered from said solution and heat-treated above 80 °C for a time sufficient to crosslink the modified polysaccharide. Modified polysaccharides suitable for use are cellulose, starch, chitin, carrageenan etc.

The preferred modified polysaccharide is a carboxyalkyl polysaccharide including carboxymethyl cellulose.

Suitable crosslinking agents are diamines or polyamines.

The crosslinking reaction occurs through amidation of the carboxyl group and over a broad pH range (see page 6, lines 2-8).

Samples 47-56 deal with these products.

The subject-matter of claim 11 is not novel in view of D4 and this is confirmed in the description of the present application on page 5, lines 6-9.

3). Art. 33(3) PCT (Inventive step) :

D4 represents the closest prior art.

The subject-matter of claim 1 differs from D4 in that the process comprises a step of activating the carboxy groups in an anhydrous aprotic solvent.

The problem to be solved is to provide a further process with a high degree of reproducibility for preparing crosslinked carboxylated polysaccharides.

The solution involves an inventive step since the available prior art does not give any suggestion or hint that it could have been possible to make the cross-linking reaction almost quantitative.

The subject-matter of claims 1-10 appears to involve an inventive step.

**INTERNATIONAL PRELIMINARY
EXAMINATION REPORT - SEPARATE SHEET**

International application No. PCT/EP99/08480

Re Item VIII

Certain observations on the international application

Art. 6 PCT :

1). Claim 2 mentions polyacrylic acids as an example of a polysaccharide. However this is unclear since the ordinary chemist will never recognize polyacrylic acids as belonging to the group of the polysaccharides.

2). The description mentions on page 4, line 21 the hemisuccinylation of the free hydroxy groups. However this forms no part of the claims.

This embodiment of the invention does not fall within the scope of the claims. This inconsistency between description and claims render said claims unclear.

(29)

INTERNATIONAL SEARCH REPORT

International Application No

PCT/EP 99/08480

A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 C08B15/00 C08B37/04 C08B37/08

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 C08B

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	WO 98 08897 A (S.C.R.A.S.) 5 March 1998 (1998-03-05) see the whole document	1-7, 11
Y	EP 0 265 116 A (FIDIA) 27 April 1988 (1988-04-27) page 9, line 36 - line 44	1-7, 11

☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

* Special categories of cited documents:

- "A" document defining the general state of the art which is not considered to be of particular relevance
- "E" earlier document but published on or after the international filing date
- "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- "O" document referring to an oral disclosure, use, exhibition or other means
- "P" document published prior to the international filing date but later than the priority date claimed

- "T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
- "A" document member of the same patent family

Date of the actual completion of the international search

14 February 2000

Date of mailing of the international search report

23/02/2000

Name and mailing address of the ISA

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INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/EP 99/08480

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
WO 9808897	A	05-03-1998	FR 2752843 A	06-03-1998
			AU 4121597 A	19-03-1998
			EP 0922071 A	16-06-1999
			NO 990935 A	15-04-1999
			PL 331848 A	16-08-1999
EP 265116	A	27-04-1988	IT 1198449 B	21-12-1988
			AT 163942 T	15-03-1998
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			AU 7960087 A	21-04-1988
			CA 1317287 A	04-05-1993
			CN 1025035 B	15-06-1994
			DE 3752176 D	16-04-1998
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			FI 874504 A,B,	14-04-1988
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			IL 84032 A	20-11-1997
			IN 170958 A	20-06-1992
			IN 170801 A	23-05-1992
			JP 2648308 B	27-08-1997
			JP 63105003 A	10-05-1988
			KR 9202702 B	31-03-1992
			NO 175374 B	27-06-1994
			NZ 221994 A	26-07-1990
			PH 26025 A	29-01-1992
			PT 85908 A,B	01-11-1987
			US 4957744 A	18-09-1990
			ZA 8707559 A	13-04-1988
JP 09176204	A	08-07-1997	NONE	

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INTERNATIONAL SEARCH REPORT

Intern. Patent Application No.

PCT/EP 99/08480

C. (Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	<p>PATENT ABSTRACTS OF JAPAN vol. 1997, no. 11, 28 November 1997 (1997-11-28) & JP 09 176204 A (KOBAYASHI KAZUKIYO ET AL.), 8 July 1997 (1997-07-08) abstract & DATABASE WPI Week 199737 Derwent Publications Ltd., London, GB; AN 399535 abstract</p>	1-7, 11

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